



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,367	06/25/2003	Louis Colarusso	ERICP0307US	2786

7590 09/20/2004

John W. Renner  
Renner, Otto, Boisselle & Sklar, LLP  
Nineteenth Floor  
1621 Euclid Avenue  
Cleveland, OH 44115-2191

EXAMINER

BRYANT, DAVID P

ART UNIT

PAPER NUMBER

3726

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/603,367	<b>Applicant(s)</b> COLARUSSO ET AL.	
	<b>Examiner</b> David P. Bryant	<b>Art Unit</b> 3726	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.  
     4a) Of the above claim(s) 18-25 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-17 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 4-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>062503 &amp; 082903</u> . | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 3726

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of Group I, Species 2, readable on claims 1-13 and 15-17, in the reply filed on August 5, 2004, is acknowledged. The traversal is on the ground(s) that the examiner's contention that the bar can be worked by heating is not applicable to the claimed invention, since both Groups of claims require cold working, not heating. Although applicant's argument is persuasive, the restriction is still proper, since the product as claimed can be made by another materially different process, such as one that does not include the claimed cutting step.

The requirement is still deemed proper and is therefore made FINAL.

Claims 18-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

However, non-elected species claim 14 has been rejoined with allowed claim 10.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-3 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kies et al. (U.S. Patent No. 4,870,848).**

Art Unit: 3726

Kies et al. teach the invention as claimed, as outlined below:

Claim 1: A method of forming a deformed reinforcing bar splice (shown as 10 in Figure 1) comprising the steps of cutting a bar 11/12/21 to length (it is well known that re-bar is cut to length, as suggested by Kies et al. in column 4, lines 38-39; and as evidenced by Howlett [U.S. Patent No. 4,752,159], in column 2, lines 48-51), cold working the bar end by radially cold forming the bar end at a section of the bar end 20 (Figure 2; Abstract; column 2, lines 28-30; column 3, lines 21-24), then forming a thread 14/15 on the compressed bar end (Figure 1; Abstract; column 2, lines 15-35), with the threads being axially within the cold formed section (Figure 1), then threading an internally threaded sleeve 18 onto two such formed and threaded bar ends 11/12 to form a deformed reinforcing bar splice 10 (Figure 1; column 3, lines 6-16).

Claim 2: See Figure 1 and column 3, lines 6-16.

Claim 3: See Figures 1 and 2; Abstract; column 2, lines 28-30; and column 3, lines 21-24.

Claim 7: As depicted in Figure 1, and disclosed in column 3 (lines 6-16), the bars 11/12 include surface deformations/irregularities 13 thereon which are flattened in the cold working step (see the smooth tapered surface 21 in Figure 2).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kies et al. (U.S. Patent No. 4,870,848).**

Kies et al. teach all claimed steps, with the exceptions of radially compressing the bar end between a pair of substantially half-round dies at least twice, and rotating the bar between compressions.

It is well known in the art to utilize a pair of substantially half-round dies to swage a cylindrical or rod-like workpiece (note U.S. Patent Re. 31,084 to Birks; and U.S. Patent No. 3,835,690 to Leonhardt et al.). The selection of such a die pair to cold form the tapered end of the bar of Kies et al. would have been obvious to one of ordinary skill in the art.

To rotate the bar between compressions would likely have been obvious to one of ordinary skill in the art to properly shape the tapered section and to ensure axial alignment of the tapered section with the remainder of the bar.

***Allowable Subject Matter***

**Claims 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

**Claims 10-17 are allowed.**

The following is a statement of reasons for the indication of allowable subject matter:

Each of claims 4, 6, and 10 include claim language pertaining to the cold formed area extending beyond the threads. This feature is not taught of fairly suggested by the art of record. As disclosed by applicant in the specification at page 7, lines 1-15, this unthreaded, cold formed

Art Unit: 3726

area ensures that the ends **40** and **42** of the coupler **24** will be well within the cold formed area upon splicing. To the contrary, as shown in Figure 1 of Kies et al., the threads **14** and **15** are formed right up into the non-cold worked portion of their respective bars **11** and **12**.

### *Contact Information*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David P. Bryant whose telephone number is (703) 308-1859.

The examiner can normally be reached on Monday-Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (703) 308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David P. Bryant  
Primary Examiner  
Art Unit 3726

dpb  
9/15/04